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NEWS AND TRENDS . . .

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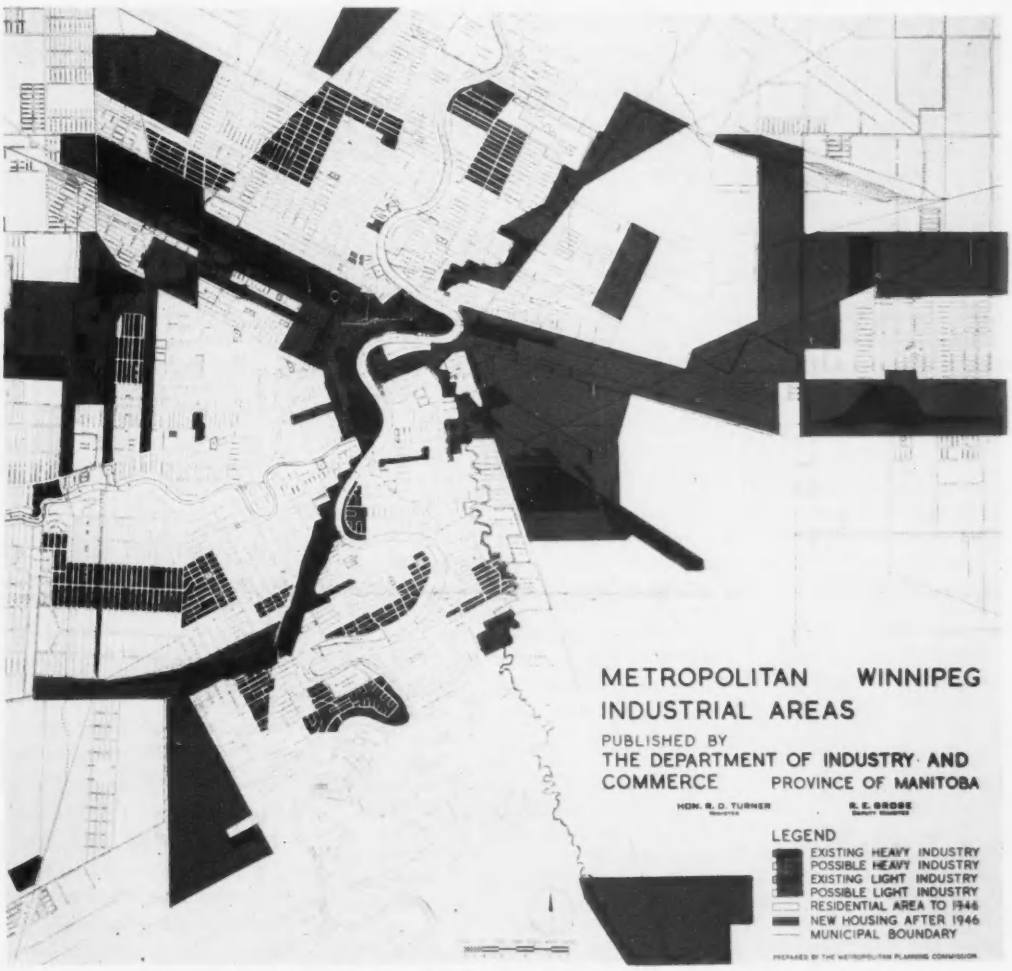
WANTED: SITES FOR INDUSTRIES

by

Robert B. Garrabrant
Secretary, Industrial Council, ULI



Metropolitan Winnipeg Is Planning Ahead for Industrial Development

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Plan-itorial . . .

Shopping Center Operations

As shopping centers emerge from their planning stages, owner-developers realize there is more to merchandising their market than merely holding a suitable site. Once construction scaffolding is cleared away, the owner prepares for Opening Day and the operations that follow. Because shopping centers are new and their operations differ widely from the ordinary way of keeping store, extensive information on experience has not yet been compiled. Realizing the need, the Executive Group of the Community Builders' Council is taking action. At their Fall Plan Analysis Sessions at the Statler in Detroit, September 26-28, the Council inaugurated its discussions on shopping center operations.

Considerations

First off, in considering the subject, the Council found that there is danger in generalization. Then too, the Council quickly learned that there is a natural reluctance to disclose financial details on how one does business. Besides, so many differentials cropped up that experience records can be cited only as cases and not as prescribed formulas. However, as guideposts and bench marks for successful shopping center operation are needed, Mr. C. J. Faherty, a member of the Council's Executive Group, led the way for discussions on "Operational Considerations in Shopping Centers."

Immediately, his remarks brought out some of the variables that affect operations and that prevent comparisons. Among these are: (1) Differences among centers—including such things as regional climate and customs, size and type of centers, sales volume and tenancies; (2) Differences in measurement areas—for example, sales area, rentable area, gross floor area, and gross building area vary (of these, "gross building area" is the consistent factor because it includes everything that has to be built, maintained, and paid for); (3) Income tax situations; (4) Relative inexperience with a new building type; (5) Fluctations in applying insurance, taxes, and depreciation. With these variables, the Council readily found that any formula such as "operational expenses of x per cent of gross income must be taken into consideration" is unlikely or questionable.

Taxes as a Factor

Assessment methods for local property tax purposes as levied against shopping centers evolved as an item in operations that also varies widely. From the discussions, it was evident that assessment practices are not uniform and no prescribed standards can be recommended as yet. There is rarely an acknowledgment in assessment that recognizes a difference in value between land used for parking and land used for building in a shopping center. It was readily seen that assessment of shopping centers for local property tax purposes is an area of shopping center operations that needs a great deal of study and research.

Operations at Northland

As a case study in operations, at the Detroit meetings, ULI Community Builders' Council affiliates had a unique visit to Northland under auspices of The J. L. Hudson Company, Detroit's leading department store. Through the kindness of Mr. Foster Winter, Treasurer of J. L. Hudson Co., ULI Trustee and Detroit's Central Business District Association President, the management of Northland Center, Inc., extended Council members the privilege of asking a full range of questions about Northland's operations. Mr. Horace Carpenter, Jr., the center's General Manager, gave every query the generous benefit of his experience and knowledge. To give others an inkling of the great value of this intimate discussion, Mr. Carpenter's remarks are briefed here somewhat in the order he offered them:

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OFFICE BUILDINGS DOWNTOWN

In the tug-of-war between Downtown and Suburbs, Downtown has just scored another telling victory. It begins to look as though 1955 may mark the turning point in the lure of suburbs for the offices of big corporations.

In August, Union Carbide and Carbon Corporation announced that it had abandoned its plans to build its headquarters building on the large tract of land it owns in Westchester County, N. Y. Instead, the Corporation will build a 41-story office building in Manhattan. This office building downtown will house office staffs now scattered through four older New York City office buildings. Again, linkage is more important to a corporation than is commuting.

WANTED: SITES FOR INDUSTRIES

by

Robert B. Garrabrant
Secretary, Industrial Council, ULI

Forecasts of things to come have a peculiar fascination, particularly when they predict startling changes in the not-so-distant future. Two such presentations have recently had wide circulation. One was a nationwide telecast depicting life as it might be lived in the year 1976. The other, on a similar theme, is a film being given wide circulation by the Chamber of Commerce of the United States, based upon the considered judgment of a number of leading trade associations well acquainted with developments in their respective fields.

Unquestionably, living conditions twenty years from now will be substantially different. Our cities will be more open; our highways, let us hope, will be less congested; our gadget-conscious people will have more push-buttons to play with. To the businessman and the planner, it raises many questions concerning how and where these new products and services can be produced.

New Plants Needed

Whether or not the way of life pictured in these presentations develops as scheduled, there is no question that American business must continue with the rapid expansion in production, distribution, and servicing facilities that has been so impressive since the end of World War II. For all this expansion, our plant facilities today are working at substantially full capacity to meet the demands of approximately 165 million people. Twenty years from now, the experts agree, U.S. population will be at least 200 million, possibly more. To supply the needs and wants of these new millions will obviously require a substantial addition to our production and distribution facilities, even at our present standard of living. To the extent that this standard can be increased, the need for facilities will be that much greater.

More Jobs Needed

Looking at the prospect from another angle, a larger population will also mean the need for more employment if the new millions are to be able to keep consumption on a par with increased production. People make their livings in a wide variety of occuptions, some in production, some in distribution, and some in the provision of various services. But in an industrial society, the underlying factor is manufacturing—the production of goods to transport, sell, and deliver to the ultimate consumer. As production grows, so grows distribution and its auxiliary services.

It seems incontrovertible, then, that during the next twenty years American production capacity must continue to expand. How and where will this development take place?

The classic elements of industrial production have been stated in four words: materials, manpower, markets, and money. Each of these can, and probably will, involve special problems, but these problems will not be insuperable. The prime objective of the American business system is to keep these factors in a reasonable state of balance and, on the whole, it has been equal to the task, as witness our present high standard of living.

More Land Needed

There is one other requisite, however, that heretofore has been taken as a matter of course, but which may well become a serious problem to industrial expansion. That requirement is good industrial sites on which to place the factories of the future.

To those who are not familiar with industrial land requirements, the idea of a land shortage may seem absurd. This is a tremendous country, and literally millions of acres are still open for development. In one sense, they have a point; certainly, there is little likelihood that any company will ever abandon the idea of building a plan for lack of space on which to place it.

But that is not the significant point. What will be needed, and in considerable quantity, is land with such characteristics and in such locations that plants can be built to produce with maximum efficiency. Any compromise with this standard will increase costs of production, and higher production costs mean economic waste that have a detrimental effect upon the national economy.

Location Affects Costs

Plant location today has much more flexibility than was the case in an earlier era. Workers no longer need to live within walking distance of the job. Power is available over wide areas instead of being limited to waterfalls. Transportation of raw materials and finished products is facilitated by a highly developed transportation system. Nevertheless, a plant site with convenient access to a good labor pool and well-located with respect to power and gas lines, through highways, railroads, a first-class airport, perhaps a waterway, as well as other community facilities, can produce at lower cost than the same plant in a remote location.

In too many areas, industrial land with these advantages is no longer available. Where this is true, the community cannot expect to get its share of future industrial expansion. What is worse, it runs a risk of losing part of its present industrial employment as companies outgrow existing plants and, lacking space in which to expand, find it necessary to move elsewhere. In an expanding economy, neither a community nor a business firm can afford to remain static. If they cannot grow simultaneously, they cannot expect to stay together.

More Acres per Worker

Even where good industrial land is still available, there is a tendency to underestimate future requirements. The modern industrial plant requires much more space per unit of output or of employment than used to be the case. Horizontal movement of goods in process is cheaper than vertical movement; hence the trend to one-story construction. Automation frequently involves tremendous machines; hence the trend to more floor space per worker. More and more employees are driving to work; hence the need for large on-site parking areas. Management is becoming more public-relations conscious; result, better architecture and more site landscaping. These and other trends all translate themselves into a requirement for larger sites. A recent plant move exemplifies the trend. The old plant was a seven-story building occupying one city block. The new plant is a one-story factory with 42,000 square feet of enclosed space on 28 acres of land.

Another factor to be considered is that many cities have less available industrial land than they think. Unless

a zoning code has been recently revised, it probably is based on the "highest use" theory, which provides a large degree of protection in the single-family residential zone, but permits almost anything to be built in the industrial zone, considered to be the "lowest" possible use for urban land. The usual consequence of this kind of zoning is that areas presumably available for industry have been cut up into many diverse ownerships and occupied by a wide variety of miscellaneous structures, most of them of little value to the community but in the aggregate presenting a real bar to industrial development. Also, much of the land in industrial zones is there because, being hilly, marshy, or otherwise substandard, it was not sought after for the so-called "higher" uses. To regard such land as an available industrial reserve, is a great mistake. Industry will not occupy it so long as better land can be secured elsewhere.

Economic Consequences

From a community standpoint, the lack of good industrial land can impose a real handicap on future economic health and development. Cities are places in which both to live and to make a living. Unless employment opportunities expand with the natural growth of population, its people will find themselves in the position of educating their children only to have them move away at maturity in order to find economic opportunities. This is not a healthy condition for the locality, the region, or the nation. It leads to stagnation, loss of tax valuations and revenues, and deteriorating public services.

Looking ahead for a period of twenty or more years, it is clearly evident that the United States will have a substantial increase in population, a still larger increase in industrial employment, and an even greater need for suitable land on which to locate additional plant facilities. Other factors being equal, those communities which are best prepared to fill this need can expect to have the best balanced and most prosperous economy.

This problem is a real challenge for planners, for civic leaders, and for businessmen with a stake in the future welfare and prosperity of the community, as well as for the industrialist. They should take a realistic inventory of the level, firm, well-located, and otherwise suitable land actually available in the community for industrial development. They should protect and conserve this land for future industrial use through adequate protective zoning and strong ownership. And, if the reserve is inadequate, they should develop and protect new plant sites within the economic orbit of the community.

VARIABLE HIGHWAY TOLLS PROPOSED AS TRAFFIC REGULATOR

Philadelphia is struggling with a unique problem. The proposed Delaware Expressway, which will connect the downtown area and the new Philadelphia-Gloucester bridge with the northeastern suburbs, two major airports, and the Pennsylvania and New Jersey Turnpike connection, threatens to be jammed with too much traffic almost as soon as it can be completed. To avert this and keep wheels rolling for high-priority traffic, a unique system of variable tolls has been proposed following a joint study by the Philadelphia Bureau of Municipal Research and the Eastern Division of the Pennsylvania Economy League.

The Delaware Expressway will extend 23 miles along the west side of the Delaware River from an interchange with the Pennsylvania Turnpike near Bristol southward to the Philadelphia-Gloucester bridge. It will have six lanes in the city section, four lanes in the Bucks County section. Estimated cost is between $165 million and $195 million.

Preliminary traffic studies indicate that, if operated as a free highway, peak traffic volume would exceed the maximum capacity of the new expressway by 1960. More lanes cannot be provided because of physical limitations on interchange facilities and on the narrow streets with which they connect in the downtown area. Even after special improvements, the six-lane expressway traffic would absorb about 75 percent of the practical capacity of existing connecting streets at peak hours on average days.

Operating the expressway as a toll facility would reduce traffic volume to a point that would not overload feeder streets, would assure rapid movement on the expressway at peak hours, and would ultimately yield sufficient revenue to repay the cost of construction, it is argued. However, this proposal has been objected to on the grounds that it would be inequitable to charge tolls on this expressway when other comparable facilities in the area are free, that it would reduce usage in non-peak hours and thus fail to relieve traffic congestion on parallel streets, and that it would discriminate against low-income users.

To offset these objections, the special study proposes a hitherto untried new system of variable tolls, with charges adjusted primarily as a traffic regulating device. Thus it would be possible by differential rates to maximize usage by trucks and express buses, to encourage car pools by allowing a credit rather than an additional charge for additional passengers in private automobiles, and thus to ensure the maintenance of high-speed traffic for priority vehicles during peak hours. During non-peak hours when ample capacity is available, it is pointed out, a readjustment of toll rates would serve to stimulate traffic volume, build up revenues, and relieve parallel streets of congestion. It is even suggested that the expressway could be made a free road during night hours when the volume of toll revenues would not balance the costs of collection.

The report admits that there is no precedent for this type of toll-road operation and that, to finance construction, it would be necessary for the city to guarantee bondholders against loss. However, it cites as comparable cases the use of variable rates by telephone companies for night and weekend calls, by utility companies for hot-water heaters used during off-peak hours, and by railroads in the issuance of off-peak "shoppers tickets."

AIR POLLUTION IN LOS ANGELES

Editor's Note

So much has been heard lately about the smog conditions in Los Angeles that it seems well to let the rest of the country know something of the County's proposal to deal with its problem through industrial zoning. The remarks presented here are excerpts from a speech given to the Southern California Planning Congress and the Southern Section of the American Institute of Planners, August 11, 1955, by Mr. Smith Griswold, Air Pollution Control Officer, Los Angeles.

Pollution and Development

It is difficult to say exactly when air pollution became a major problem in Los Angeles County. We do know that smoke and other foreign matter from citrus smudging created serious problems in portions of the County during

the 1930's. We also remember instances of reduced visibility and general haziness which were common-place in the 1940's. It wasn't, however, until after World War II that eye irritation, plant damage, and rubber cracking started occurring with such alarming frequency and intensity that the public became aroused.

This upsurge of air pollution coincided with upsurges of development and expansion in the Los Angeles basin. From 1941 to 1950, more than a billion dollars in new capital investments were made by industry in the County, and population in Los Angeles County reached 4,116,901 in 1950, a 49 percent increase over 1940. This activity was accompanied by increased registration of automobiles and construction of new homes, most of which became sources for additional amounts of aerial waste matter.

To understand the situation which resulted, the following two fundamentals must be accepted:

1. The concentration of man-made pollution reached a level beyond the ability of the air to clean itself because:
   a. Industry experienced a tremendous growth, and
   b. Population increased greatly.
2. The pollutants were retained in this area by
   a. Temperature inversions
   b. Weak and alternating winds
   c. Mountains.

Planning cities with air pollution in mind is, as you well know, neither new nor original. There are many historical examples of ancient cities deliberately placed so they would take advantage of warm sunlight and cleansing breezes. The Greeks were masters of this technique as is demonstrated in the ruins of Rhodes, Priene and other ancient cities, and in the records of Socrates, Plato and Aristotle.

There are many existing examples of modern cities which have expanded in one direction instead of another because of the prevailing winds which minimized, on that side of town, some offensive odor or other air pollutant.

To cite just a few, there is the Shaker Heights residential development east of downtown Cleveland; Kansas City's Country Club District southwest of the city; Forest Hills, Long Island, east of Manhattan; and Mariemont, Ohio, on the outskirts of Cincinnati.

Little thought seems to have been given, however, to the effect of wind patterns in the Los Angeles basin after the original instructions of Charles II, King of Spain, had been complied with. He directed in 1573 that the streets of new pueblos be on the diagonal rather than due north and south so that prevailing winds would cleanse them of odors, fumes, and insects.

Industrial zones have since been established upwind from residential areas so that the latter receive winds laden with fumes, dust and odors. Residential areas have been developed in locations sheltered from winds so that the resulting change of air is minimal. Certain foothill regions receive and are unable to dispel quantities of pollution which are not of their own creation.

Industry and Air Pollution

In an effort to prevent this condition from becoming any more acute and to relieve it if at all possible, the Air Pollution Control District, since 1952, has been conducting a wind flow study in the Los Angeles basin. It is expected that this study will supply sufficient data regarding wind frequencies, directions, speed, and other characteristics so that future industrial establishments and areas can be located to utilize prevailing winds beneficially. This same data may very well indicate to us that certain existing but undeveloped industrial zones are, meteorologically speaking, in the wrong locations and should be rezoned for less offensive uses before development occurs.

When this wind flow data is in usable form it may be necessary for every Planning Commission in the County to re-appraise its own local zoning pattern. Perhaps some cities will find that their industrial zoning is upwind from their residential section, or that of their neighboring communities, and will need to be relocated or eliminated in the interests of basin-wide clean air.

Industrial Zoning with Performance Standards

In cases where an existing industrial zone is partially developed and obviously impractical of removal or conversion to a lighter use, consideration may have to be given to adoption of a more restricted type of industrial zoning.

Another interesting aspect of future industrial zoning is the possible adoption of performance standards based on the type of pollutants generated. There is much current thought in this direction among planners and industrialists. Performance standards for industrial location appear to be the most technical and scientific approach that so far has been considered. As the Air Pollution Control District is itself a technical organization, we have great sympathy and high hopes for controlling air pollution by the performance standards method in industrial location.

PLANITORIAL

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Parking—There are 8,541 parking spaces arranged in 9 separated lots surrounding the shopping cluster and tied together by an outer circumferential road network. Parking stalls are at a 52 degree angle, marked by "hairpin" painted lines spaced 8½ feet apart. By direct survey, 4,600 cars have been clocked as one hour's outgoing peak. On Saturdays 28,000 cars or over three times the parking capacity have been recorded. By another count, the average occupancy per car is 3.38 persons, with average purchases per car noted as being about $9.00. Similarly, 6 to 7 per cent of the Center's total number of customers arrive by public transportation for which ample bus loading facilities are provided.

Parking occupies 74 acres. Access roadways on the property take up 10 acres. Apart from the Center's land reserve, 105 acres are in use for buildings, roads, and parking.

Employee Parking—Northland Center, Inc. has no contract with tenants' employees. The only contact with these employees is through the stores' management. There are 101 tenants at Northland and over 5,000 employees. These people are required to park in the outer areas of the lots. Compliance with this request is about 90 per cent. Northland Center's private police force constantly looks for violators by checking against car registrations but these are difficult to get in the first place. Yet car registrations prove to be a more practical method than any sticker or other special area type of control over employee parking.

Maintenance—Northland Center, Inc. handles maintenance through a crew of 80. The entire cost of parking lot

maintenance is prorated among tenants on the basis of their leased space at a present cost of 24½ cents per sq. ft. per year. Tenants contract independently for window washing, which is not a management maintenance item. Air-conditioning, heat, light, and water are distributed to tenants through meters and on a basis provided for in leases.

Tenant air-conditioning from Northland's central plant has proved satisfactory. Chilled water at 40°F is circulated in pipes to the stores. Meters record the amount used through a computer device that converts volumes and temperatures into B.T.U.'s as a basis for management's charges to the tenant.

Night Openings—The Center is open three nights each week. These nights, Thursday, Friday and Saturday, account for 32 per cent of the total business volume. Of these nights, Thursdays are strongest. Hours of opening are up to individual tenant decisions though Hudson's sets the pace. Restaurants stay open one half hour after other stores close and open at 7:00 each morning. The drugstores are regularly open 14 hours every day. As yet, there has been no decision about another night opening. In connection with shopping hours, Mr. Carpenter reported that Thruway Plaza in Buffalo opens at noon each day and stays open 'till 9:00 each night, six days a week. High intensity lighting of parking areas is vital for night shopping.

On Sundays only restaurants and drugstores are open although the entire Center is used as a sight-seer's mecca. If the supermarket wanted to institute Sunday openings, there is no way for the Merchants Association to object. Parenthetically, there is but one supermarket at Northland because groceries are not considered as pullers in a regional type of shopping center. In the case of Northland's supermarket the basement is used for stock and food preparation. The package pick-up station works well except at peak periods when a police detail has to channel cars to the waiting lanes. The market finds supervision of employees is the "bug" in its package pick-up operation.

Store Fronts and Signs—Individual store fronts were designed by the architects of the Center in consultation with the tenant. The variety in store front treatment and materials under the flanking canopies adds life and color to the Center's appearance. The canopies are 14 ft. high from the sidewalk to the underside of the colonnade and the covered walks are 14 ft. wide.

Northland has sign approval in its leases. Trade mark signs are sanctioned but are controlled by three rigid requirements: Signs must be placed flat against the facade with a 12 inch limitation on letter projection; signs must be placed under the colonnade; signs must have no moving parts or flashing lights. Window "paste-ups" are prohibited by lease provisions. It is found that window streamers such as "Rubbers" or "Umbrellas" on a rainy day are very hard to police so only continued or flagrant violations are protested by management.

Rent Schedules—Leases range from one to 25 years in duration, with dispersion of termination dates. This staggering prevents a "slug of leases to be renegotiated at any one time and in lower real estate cycles." Smaller tenants are on the shorter terms. All rent schedules are based on percentages. The percentage depends on the size of space, location within the center, and corner influence. Basements are rented at $1.40 per square foot regardless of leased area. Main level floor space ranges from $2.00 to $7.15 per sq. ft. minimum rental.

Leases call for Management to furnish complete storefront, asphalt tile B in sales area, walls plastered, walls painted to tenant color selection, air-conditioning ducts, wiring to outlets, no lighting fixtures, and no show window backs or flooring.

At Northland, the J. L. Hudson store is dominant but is considered as "just another tenant." But in the center's planning much thought and study was given to the size, type and kind of auxiliary stores. All stores are doing a better volume of business than was expected. Sales volumes are running 20 to 25 per cent ahead of 1954, though that year must be remembered as not being a good retail year in Detroit. It is expected that it will be 5 years before Northland reaches its maximum stride.

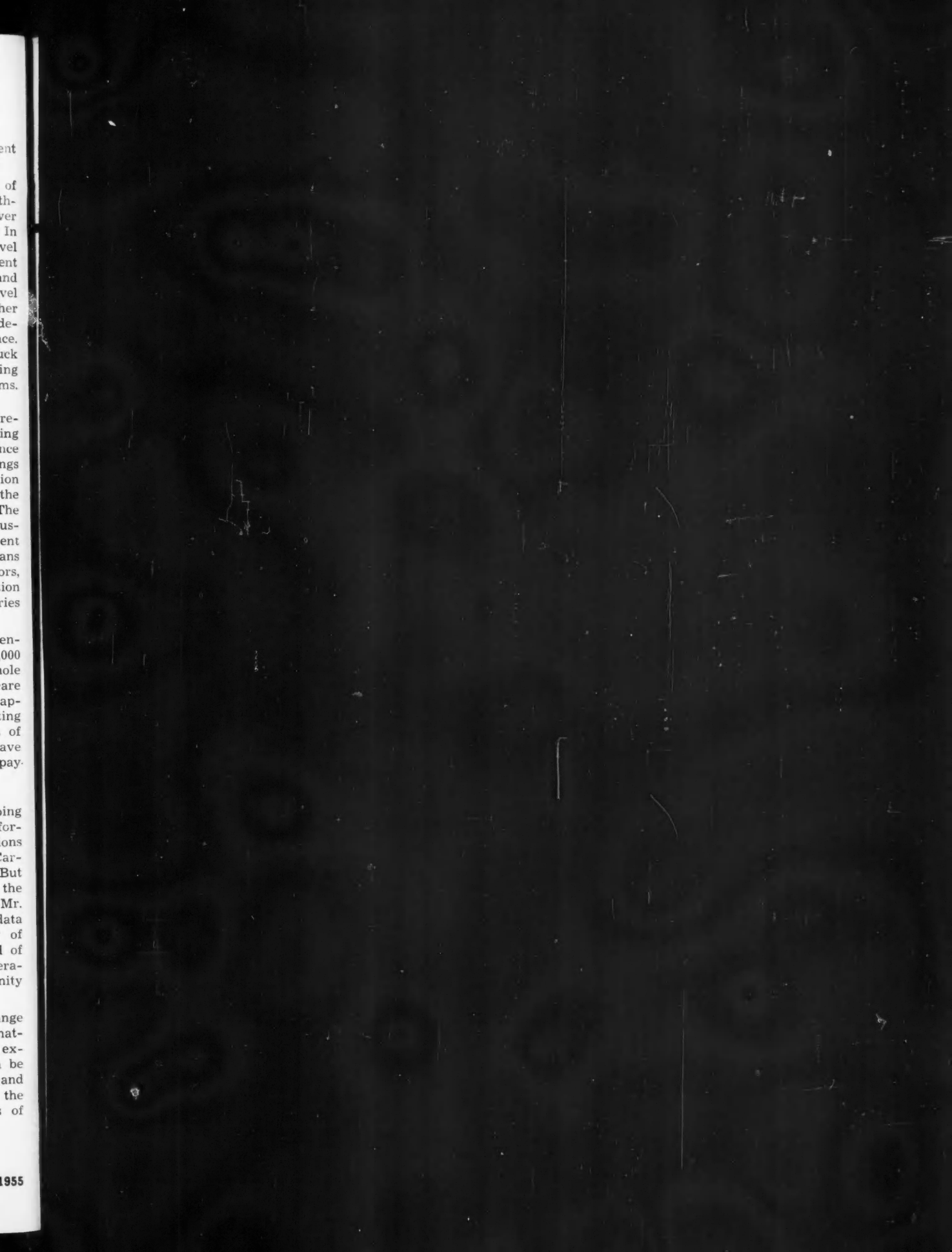
Eastland—A second regional shopping center for which Mr. Carpenter is also General Manager, is now under construction. The new Eastland Center, 14 miles away, is a counterpart to Northland. Eastland's comparable lease provisions eliminate interior painting and floor covering, and restrict interior partitions to those of the permanent space-separation walls.

Eastland will have 70 tenants and of these, only two are not now at Northland. At Eastland there will be fewer small stores and "little" tenants. In Eastland's planning, the lower level parking area is eliminated to prevent the condition that arises at Northland where cars early fill the lower level parking area, thus preventing other cars from having easy access to the department store's package pick-up place. Also at Eastland, the lower level truck road will be simplified by eliminating sawtooth loading docks and platforms.

Construction—Northland is built of fireproof construction. In considering sprinklers, the savings in insurance rates did not make up sufficient savings to warrant the additional construction costs for the tenant stores. Only the J. L. Hudson space is sprinklered. The department store, in case of fire, is susceptible to panic. As the department store is multistoried and without means of escape directly to the outdoors, sprinklers are an extra fire protection devise. In addition the store carries blanket insurance for all locations.

In other cost considerations, the Center was built originally for a 400,000 sq. ft. expansion. Hence, the whole mechanical system is sized to take care of future space loads. Part of the capital investment is in self-liquidating utilities. So in any considerations of overall costs, contributory items have to be broken down into those that pay a direct return on the investment.

Operations Summary—The foregoing reports are but a fraction of the information about Northland's operations volunteered so generously by Mr. Carpenter at the CBC Detroit meeting. But the Northland visit, together with the "round-table" discussion led by Mr. Faherty and the incidental bits of data that came out during the review of plans submitted, indicates the kind of information on shopping center operations that stems from the Community Builders' Council meetings.

As this kind of experience exchange continues, accounts on operational matters can be built up. With enough experience exchanged guideposts can be set up similar to the principles and policies evolved by the Council on the planning and development phases of shopping centers.

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